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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10 028,379	12 21 2001	David A. Christian	US010694	4870

7590 12 19 2002

Corporate Patent Counsel
U.S. Philips Corporate
580 White Plains Road
Tarrytown, NY 10591

EXAMINER

TRAN, CHUC

ART UNIT PAPER NUMBER

2821

DATE MAILED: 12 19 2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/028,379

Applicant(s)

CHRISTIAN ET AL.

Examiner

Chuc D Tran

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-7 and 9-17, are rejected under 35 U.S.C. 102(b) as being anticipated by Rodriguez-Cavazos (USP. 4,961,032).

Regarding claims 1, 3 and 4, Rodriguez-Cavazos disclose a cathode tube convergence circuit (10) (Col. 4, Line 33) comprising:

- a low voltage power supply (13), and a high voltage power supply (11) (Col. 4, Line 51-68), and a device rail circuit (Fig. 1);
- a low-power dissipating switching network (11,13) (Fig.1) which switches between the low and high voltage power supply (Col. 5, Line 3-20) (Col. 5, Line 32-68); wherein
- the low voltage power supply (V1) operates 15 volts (Col. 6, Line 24).

Regarding claims 5 and 6, Rodriguez-Cavazos also disclose the low voltage power supply drives a standard deflection yoke of the cathode ray tube (Col. 1, Line 4-9); wherein

- the high voltage power supply drives a convergence yoke during retrace interval of the cathode ray tube (Col. 1, line 61).

Regarding claim 7, as recited in claim 1, wherein output stage (16) receives a power from

one of the power supplies at a particular time (Col. 6, Line 24), and a power from the other of the power supplies does not traverse the switch network at the particular time (Col. 6, line 27) (Col. 6, line 19-30).

Regarding claim 9, wherein the switching network further includes transistor and diodes (Col. 6, Line 31).

Regarding claim 10, as recited in claim 1, the convergence circuit (10) drive convergence yoke of the cathode ray tube (Col. 4, Line 33).

Regarding claim 11, as recited in claim 1, further comprising a voltage feedback circuit (Vsen) to initiate the switching (Col. 4, Line 41-68) (Fig. 1).

Regarding claim 12, Rodriguez-cavazos disclose a cathod ray tube convergence circuit, comprising:

- a boost on demand circuit (10) which includes a positive polarity convergence circuit (11), and a negative polarity convergence circuit (13), and wherein the positive and negative polarity convergence circuits further comprise a switching network (Col. 5, Line 36-68) (Fig. 1).

Regarding claims 13 and 14, as recited in claim 12, wherein the positive and negative polarity convergence circuits each include a first low voltage rail and a second high voltage rail (Fig. 1).

Regarding claims 15 and 16, as recited in claim 12, wherein the positive and negative polarity convergence circuit outputs high and low voltages to deflection yokes of the cathode ray tube (Col. 5, Line 36-68).

Regarding claim 17, as recited in claim 12, wherein the boost on demand circuit ouputs a

high voltage to drive at least one convergence yoke for relatively short time duration so that output power is conserved (Col. 5, Line 51).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roddriguez-Cavazos.

Regarding claim 2, Rodriguez-Cavazos disclose a dual power source output amplifier set forth in the claim 1 except power dissipation of the low power switching network is in the range of approximately 25 watts to approximately 50 watts. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the power dissipation network range approximately between 25-50 watts in order to save the power supply to drive the coil, since it was known in the art that (Col. 2, Line 27-35).

Regarding claim 8, Rodriguez-Cavazos disclose a dual power source output amplifier set forth in the claim 1 except field effect transistor which dissipates less than approximately 200mW of power. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide field effect transistor which dissipates less than approximately 200mW of power in order to improve over the conventional convergence circuit power supply design, reducing supply circuit size, since it was known in the art that (Col. 2, Line 46-63).

Regarding claim 18, as recited in claim 17 except a low voltage for approximately 75% of an operating time of the cathode ray tube. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the boost on demand circuit outputs a low voltage for approximately 75% of an operating time of the cathode ray tube in order to enable the boost on demand circuit in the low voltage mode for a longer period of time, since it was known in the art that (Col. 8, Line43) (Col. 10, Line 32) (Col. 10, Line 55-68).

Citation or relevant prior art

Prior art Rodriguez-Cavazos (USP. 4,961,032) disclose a dual power source output amplifier.

Prior art Fischman et al (USP. 3,979,640) disclose a horizontal deflection system.

Prior art Collette et al (USP. 4,042,858) disclose a television receiver protection circuit.

Prior art Manske (USP. 3,798,497) disclose a solid state television receiver with magnetically regulated power supply.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D Tran whose telephone number is (703)306-5984. The examiner can normally be reached on M-F Flex hours.

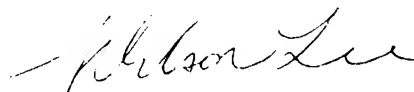
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (703)308-4856. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-4048 for regular communications and (703)308-7722 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

A handwritten signature in cursive script, appearing to read "Nelson Lee".

TDC

December 13, 2002